

In This Issue

GIS Division News
Salisbury GIS
Division Launches
Revised Website 1

Project Spotlight
GIS-Enabled Computer
Aided Dispatch Aids Police
Department..... 1

More GIS Division News
Salisbury Named
ESRI Authorized Learning
Center 1

County Corner Update
Rowan County
Orthophotography Project
Underway..... 2

User Insight
Dear GUS 3

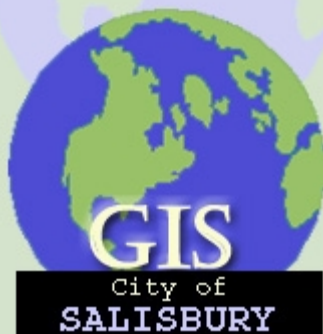
County Corner Update
Rowan County Cadastral
Project..... 5

User Insight
Comments &
Suggestions Welcome.. 5

Highlight
Metadata 6

Training Opportunities .. 6

**GIS Meeting &
Conference Calendar..... 6**



GIS DIVISION NEWS

Salisbury GIS Division Launches Revised Website

By Kathryn Clifton
City of Salisbury GIS Coordinator

The City of Salisbury GIS Division has been hard at work to revise the existing website. The new site sports a new look, as well as a revised content layout for easier navigation. Response to the site from the public has been great so far, with over 450 visits since July 1, 2002.

The site is divided into five basic sections—

1. GIS Center Home

This is the place to go for information about the GIS Division staff, recent Users Group meetings, and the quarterly newsletter.

2. GIS Overview

GIS Overview provides an introduction to the concepts and components of GIS, and how it is being incorporated into different departments and divisions at the City of Salisbury. Learn what metadata is and its importance to an effective GIS. Read the 2001-2002 Master Plan to see what's in store for the coming years with GIS.

See **Website**, page 2

Project Spotlight

GIS-Enabled Computer Aided Dispatch Aids Police Department

By Tom Lowe
Former City of Salisbury Crime Analyst

Y2K. The phrase was an ominous one in late 1999. Earlier in the year, Information Technology Systems Analyst Merenda Overcash had evaluated the Salisbury Police Department's Computer Aided Dispatch (CAD) software and found it not Y2K compliant. After a great deal of research and discussions with other municipalities, she settled on a product by Open Software Solutions, Inc. of Greensboro, NC.

See **Computer Aided Dispatch**, Page 4

MORE GIS DIVISION NEWS

Salisbury Named ESRI Authorized Learning Center

By Kathryn Clifton
City of Salisbury GIS Coordinator

The City of Salisbury Training Room was designated as an ESRI Authorized Learning Center (ALC) on July 18, 2002.

The ESRI Authorized Training Program requires at least five computers in a classroom with current ESRI software installed. An ALC must have an ESRI Authorized Instructor on staff or have access to an ESRI Authorized Instructor to teach the ESRI class. An ALC must teach at least two ESRI-authorized classes per

See **Authorized Learning Center**, Page 5

COUNTY CORNER UPDATE

Rowan County Orthophotography Project Underway

By Adrian Rollans
Rowan County GIS Coordinator

Data development at Rowan County continues...on schedule.

Aero-Dynamics, Corporation of Charlotte, NC flew over Rowan County in early March 2002, an optimum time for the collection of leaf-off data. Complete delivery of orthophotography is expected one year from the initiation of the project.

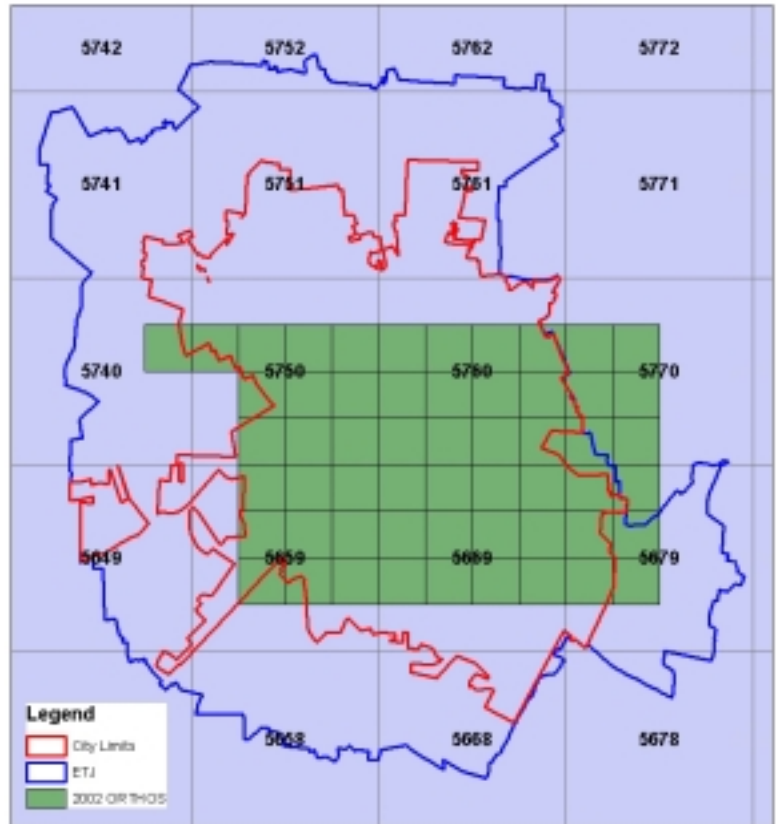
To date, fifty-six (56) 1 to 100 scale tiles have been delivered. Subsequent shipments will be sent the first of each month. Initial shipments are being made available in TIF format. Aero-Dynamics, Corporation will also deliver the entire data set in MrSID format.

All of the municipal limits will be available at 1" = 100'. The City of Salisbury will receive orthophotography at this scale within the ETJ and along corridors where water lines exist or plan to be built. The entire County will be available at 1" = 400'. Selected areas will be available at 1" = 200'.

This orthophotography project is part of a mapping upgrade to the countywide Enhanced 9-1-1 system to assist in better locating wireless callers in the County and all of its municipalities.

The City and County will offer this orthophotography in a multi-volume CD set, and will make it available for purchase upon completion of the project. Both the City and County anticipate incorporating this new orthophotography into online GIS applications.

Contact Adrian Rollans for more information about this project.
PHONE 704-638-3131 EMAIL rollansa@co.rowan.nc.us ♦



Areas in green illustrate 100-scale 2002 orthophotos delivered as of August 1.

...Website (from page 1)

3. Data Catalog

Data is the driving force for a GIS. Here, find a complete listing of data currently available. Read through the metadata to better understand the data that is available.

4. Resources

Links to different software vendors, GIS data sites, and statewide and national organizations are all available here. Also, peruse the GIS calendar to find out about upcoming events in the region.

If there is a link you don't see or an upcoming event you would like others to know about, just submit it using the suggestions page.

5. Services

Need to request some data or a map? Just download the GIS Data Request form, complete the left-hand side, and send it back. Your request will be completed promptly. If you have any questions about data availability, etc. just look in the Data Catalog. ♦



The key to a good website is to organize it so that it is easy to use.

USER INSIGHT

Dear GUS,

Dear GUS (GIS User Specialist) is a column that will address common questions that GIS users may encounter.



Dear GUS,

What should I include on my map layouts?

Signed, New User

Dear New User,

That is an excellent question, and one that is frequently dismissed as being trivial. There are a number of elements that form the basis of a good map.

A **descriptive title** should be used to explain in a short phrase what you are trying to illustrate with the map.

Obviously, the **map** will take certain stage on the layout.

A **map legend** should be included to clearly explain symbols used to express geographic features on the map.

Map scale should be shown as a measure (1 inch = 400 ft), a ratio (1:4800), or a graphic scale bar.

Also, the **map projection** should be noted. Here at the City, we always use NC State Plane, North American Datum, 1983.

A **North arrow** should be added to allow the person reading the map to get his bearings, and better understand the spatial relationship of different locations on your map.

It's always a good idea to include a **source statement**, which should indicate who produced the map and when this version was printed.

And finally, a **data disclaimer** should be included to alert the person reading your map to the variety of sources for data, as well as whom to contact with questions.



Dear GUS,

I need to be able to share static maps with a number of people. And, I'd like to put them out on the web. What's the best alternative?

Signed, Static GIS on the Web

Dear Static GIS,

It's great that you are producing maps that you want to share with others on the web. Sharing static map layouts with people who visit your website is simple, especially if you are using ESRI's new ArcGIS (ArcMap) 8.2 product.

You can quickly and easily produce an Adobe Acrobat PDF (portable document format) by using the following menu selections. Go to FILE, choose EXPORT MAP, and then change the filetype to PDF. Enter a name for the file you will create, and click EXPORT. It's that easy!

The PDF document you created can now be made accessible to individuals visiting your website.



Dear GUS,

I've been using ArcGIS 8.2 since it was loaded on my machine. And, I really like the ability to have polygon layers appear semi-transparent, especially when they are overlaid on orthophotos. But, I've had mixed results when I print my layouts.

What's wrong?

Signed, Perplexed

Dear Perplexed,

I'm glad to hear that you are experimenting with the new features of ArcGIS 8.2. And, don't be discouraged when you encounter a few glitches here and there.

From the information you provided, it sounds like you simply need to adjust the output image quality. If you try to use the transparency options and then print the map at "normal" quality, some of your lines may appear jagged. Instead, try printing at "best" image quality.

You can adjust the output image quality for your maps by using the following menu selections. Go to FILE, choose PRINT, and then click on the SETUP button next to the printer name. Adjust the output image quality by clicking on the sliding bar in the lower left-hand corner of your screen and dragging it all the way over the "best". Then, click OK to save that setting in your page setup, and click OK again to print your map.

I hope this helps you with your printing problems!



If you would like to submit a question to GUS, simply direct your e-mail to deargus@salisburync.org. Or visit the Dear GUS webpage at http://gis.salisburync.org/dear_gus.asp. ♦

... Computer Aided Dispatch (from page 1)

Dispatchers key information into the "Call Taker" window.

Originally, the Visual CAD was implemented in a tabular fashion. Dispatchers keyed in an address as calls came in, and dispatched officers to the scene. Much of how they dispatched relied upon their knowledge of the City of Salisbury and the location of addresses, businesses, etc.

A mapping component for the OSSI Visual CAD product was purchased later, in December 2000. A great deal of work had to be done prior to its implementation. . . primarily, planning for the implementation and determining data layer needs. Through a number of meetings held within the Police Department, it was determined that street centerline, districts, beats, reporting areas, neighborhoods, and housing layers would be necessary. With the assistance of GIS Coordinator Kathryn Clifton, all data layers were completed. Now, they are updated on an as needed basis.

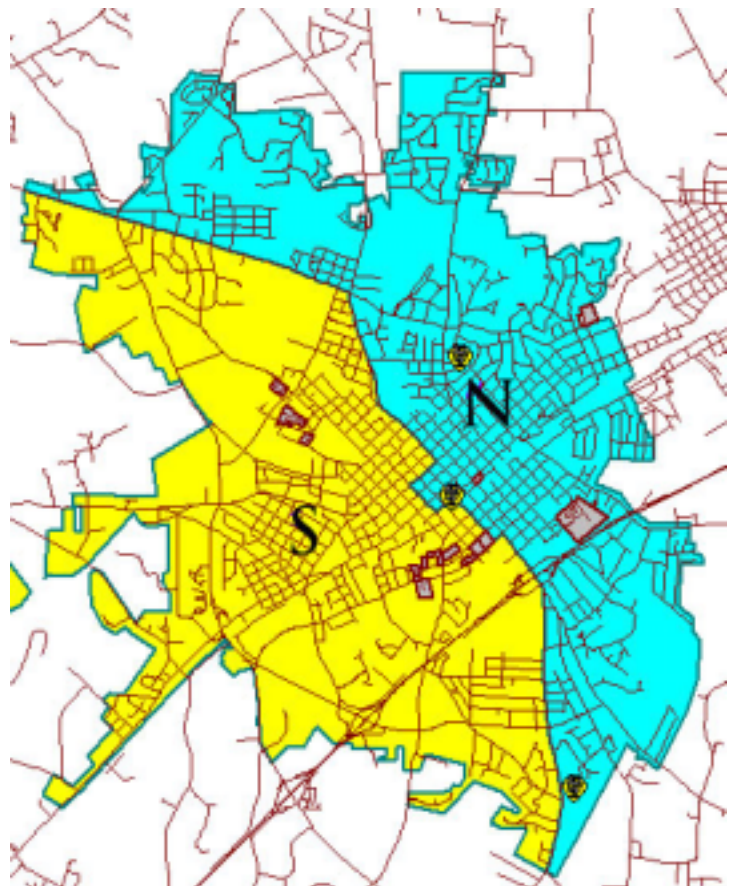
The mapping component actually "went live" in May of 2001. This meant that a process that previously was completely tabular now became spatially enabled. All address matching information was pulled directly from the street centerline data layer. This provided the Police Department a great time savings, as new addresses no longer had to be added to a tabular address list.

Dispatchers receive benefits from the mapping component as well. Now, when dispatchers receive a call and enter it into Visual CAD, the system instantaneously plots the call on the map. This provides a quick point of reference to facilitate the dispatchers' ability to locate officers closest to the event. When an officer arrives on the scene, an icon of a badge appears

at the location. If dispatchers need to review call information, they simply click on the badge icon, and the call information is retrieved. Information about the district, beat, reporting area, and neighborhood are populated automatically by Visual CAD from the other data layers.

OSSI's Visual CAD is also integrated with the Records Management System (RMS). Any police officer in-house can see the same map layers used by the dispatchers. Officers can, with no specialized training, search for information about accidents, arrests, etc. and pin map them.

Using ESRI's ArcView and a Crime Analysis extension, Officer Tom Lowe was able to define search criteria such as types of offenses, locations, occurrence days, times, etc. and have the events pin mapped and time sequenced. This information enhanced the departments' ability to forecast future crimes and areas of crime. This crime analysis tool quickly identified high crime locations and saved hours of time-consuming research and mapping. ♦



A map aids dispatchers in visualizing the locations of incoming calls.

COUNTY CORNER UPDATE

Rowan County Cadastral Project

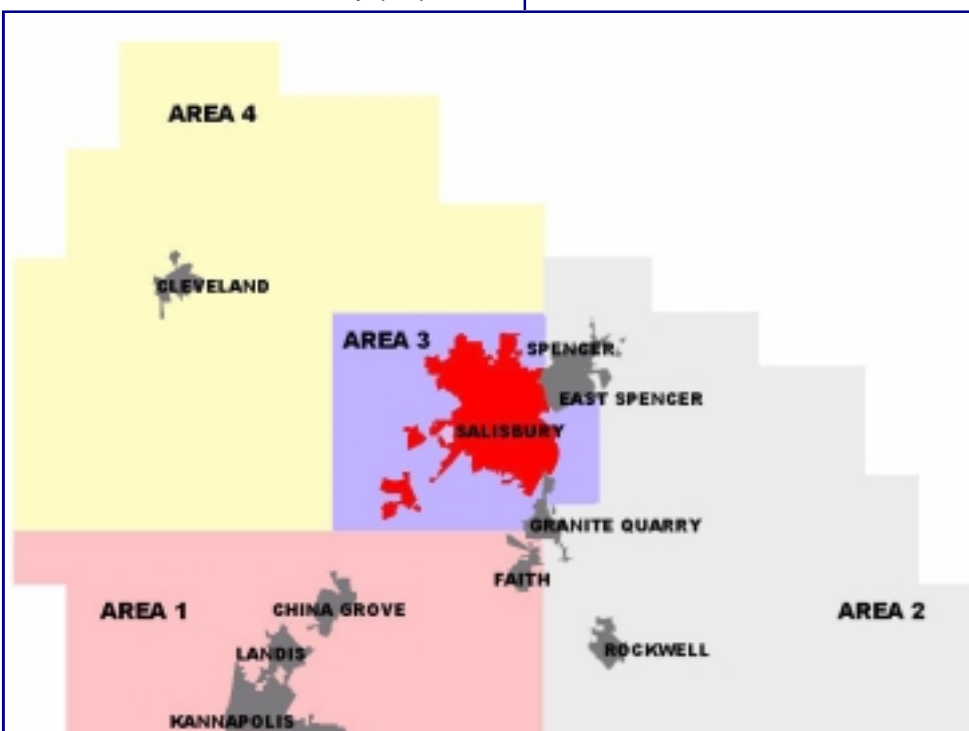
By Adrian Rollans
Rowan County GIS Coordinator

Data development at Rowan County continues...slightly behind schedule.

Although Analytical Surveys Incorporated (ASI) has moved its operation to Texas, cadastral data continues to arrive at the County GIS office. Area 3, of particular interest to City of Salisbury staff, is well underway. Area 4 has not yet been started, but should be relatively simple to complete as it consists of a mere eight to ten thousand parcels (see map below regarding Areas 3 and 4).

The cadastral project also includes structure addressing and updating the County street centerline file. A point file will be generated by ASI that contains the current field-verified address for a location, as well as a recommended updated address. County staff will review these recommendations as they prepare for numerous public hearings regarding the assignment of addresses. The readdressing of structures will aid County E-911 staff in their response to emergencies.

In an effort to assist County staff with readdressing within the City limits of Salisbury, GIS Coordinator Kathryn Clifton will provide a detailed listing of the City's Master Address Table (MAT). This MAT contains County addresses for each parcel number within the City limits, as well as the corrected City-recognized address. City staff in the Development Services Division of the Land Management & Development Department have been instrumental in the creation of this MAT. Addresses for the City of Salisbury are assigned by Development Services staff. ♦



The County was divided into four areas for ease of delivery of data.

USER INSIGHT

Comments &
Suggestions
Welcome



Your comments and suggestions for *GIS In the News* would be greatly appreciated. Also, if you have a question about GIS, its uses, software, etc. please submit them as well.

Just send an e-mail to Kathryn Clifton with the subject "GIS In the News". ♦

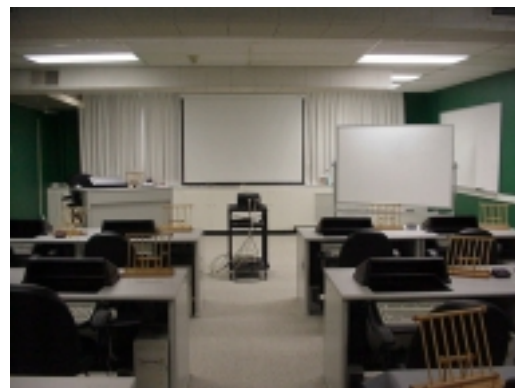
... Authorized Learning Center (from page 1)

year to maintain authorization.

What does having an Authorized Learning Center mean for the City of Salisbury?

- ESRI software can be purchased at a reduced price for use in the training room
- The City of Salisbury becomes an ESRI Business Partner
- Training by an ESRI Authorized Instructor for ArcView 3.2 and ArcGIS 8.2 will be readily available to City staff

To request training, visit <http://gis.salisburync.org> !



The Salisbury Training Room is equipped with Pentium IV 1.6 GHz machines, and can accommodate up to twelve students.

TRAINING OPPORTUNITIES

ArcView 3.2

Training is available for the desktop application ArcView 3.2. Class size is limited to four students.

ArcView 8.2 (ArcGIS)

The ESRI Authorized Trainer exam for ArcGIS has been completed by instructor Kathryn Clifton. However, the computers are currently in the process of being upgraded. More news on availability of training will follow. Class size is limited to twelve students.

The instructor must have at least two weeks' notice prior to the date you would like to receive training so that adequate manuals, etc. can be ordered.

Contact Kathryn Clifton if you are interested in training for ArcView 3.2 or ArcView 8.2 (ArcGIS). ♦

HIGHLIGHT

Metadata

By Kathryn Clifton
City of Salisbury GIS Coordinator

Metadata. It seems like such a simple concept—keep track of the who, what, when, where, how, and why of data. However, creating good (usable and standardized) metadata can take a lot more effort. Some of the complexity of the Content Standard for Digital Geospatial Metadata (affectionately known as CSDGM) has been taken care of through the creation of metadata worksheets.

City employees creating new data layers to be shared among all GIS Users within the City can receive assistance from the GIS Coordinator in completing the four simple worksheets. The completion of these worksheets answer such questions as... *Who* made the data, who is responsible for it, and who distributes it? *What* processes were used to develop the data? *Where* is the geographic extent of the data? *When* was the data made, and when is (or was) it applicable? *How* is the data represented, and how reliable is it? And finally, *why* is this data important to anyone in the first place?

ESRI's new ArcGIS family of products makes the creation of metadata that much easier. By default, when you try to view an item's metadata, ArcCatalog will create it for you automatically if it doesn't already exist; it will then add many of the item's properties to it. Once created, metadata becomes part of the item itself. It is automatically moved, copied, and deleted along with the item.

Documenting your data protects your organization's investment in that data. Without knowledge of the data's accuracy, provenance, and age, you can't have a high level of confidence in decisions based on that data. Creating detailed metadata describing these qualities ensures that you can continue to use your data and make decisions based on that information for as long as it is valid. ♦

GIS Meeting & Conference Calendar

GIS Users Group Meeting

- August 15, 2002 12 NOON
 - October 17, 2002 9AM
 - December 19, 2002 12 NOON
- *Christmas Party

GIS Users Group Meetings are held bi-monthly at the Plaza, 100 East Innes Street, in the second floor conference room. Meetings alternate between morning and afternoon.

CADre (<http://www.cadresys.com>)

5701 Westpark Drive Suite 110 Charlotte, NC 28217

- September 27, 2002 "Lunch & Learn" Session

ESRI Southeastern Regional Users Group

SERUG (<http://www.gis-services.com/SERUG/index.html>)

- November 3-8, 2002 Chattanooga, TN

GIS Day 2002

(see <http://www.esri.com/gisday>)

- November 20, 2002

Urban & Regional Information Systems Association (URISA) Fall Conference (<http://www.urisa.org/>)

- October 26-30, 2002 Chicago, IL

North Carolina GIS Conference (bi-annual event) sponsored by the NC Geographic Information Systems Association (NC CGIA) and the NC Urban & Regional Information Systems Association (NCURISA)

- February 20-21, 2003 Winston-Salem, NC

If you know of an upcoming event that may be of interest to other AutoCAD and GIS users, please e-mail Kathryn Clifton with the location, date, and other details. ♦

City of Salisbury

GIS DIVISION

217 South Main Street
Salisbury, NC 28144

Kathryn Clifton, GIS Coordinator

PH 704-638-5246

FX 704-638-8522

EM katclif@salisburync.org